

derived from central nervous system cells are glioblastoma cells.

6. (Cancelled) The mouse according to claim 1, wherein at least one of said tumor cells contains at least one transgene.

7. (Cancelled) The mouse according to claim 6, wherein at least one of said transgenes is a human immunomodulator gene.

8. (Cancelled) The mouse according to claim 6, wherein at least one of said transgenes is delivered by a viral vector.

9. (Cancelled) The mouse according to claim 1, further comprising an immunogen.

10. (Cancelled) The mouse according to claim 9, wherein said immunogen is a vaccine.

11. (Cancelled) A tumor cell vaccine comprising a tumor cell expressing B7-2 and at least one additional immune modulator.

12. (Cancelled) The vaccine according to claim 11, wherein said at least one additional immune modulator is a cytokine.

13. (Cancelled) The vaccine according to claim 12, wherein said cytokine is selected from the group consisting of interleukin 2, interleukin 4, interleukin 6, interleukin 7, interleukin 12, granulocyte-macrophage colony stimulating factor, granulocyte colony stimulating factor, interferon-gamma, tumor necrosis factor-alpha.

14. (Cancelled) A method of treating a tumor comprising:

a) providing:

i) a subject having a tumor of the central nervous system;

ii) an expression vector encoding the human B7-2 protein and at least one additional immune modulator;

b) transferring said expression vector into said tumor under conditions such that said B7-2 protein and said immune-modulator are expressed by at least a portion of said tumor.

15. (Cancelled) The method according to claim 14 further comprising, prior to transfer of said expression vector, the step of removing at least a portion of said tumor from said subject and following said transfer of said expression vector, irradiating said tumor cells expressing said B7-2 protein and said immune-modulator and introducing

said irradiated tumor cells back into said subject to create an immunized subject.

16. (Cancelled) The method according to claim 15 further comprising, introducing at least one additional dose of irradiated tumor cells expressing said B7-2 protein and said immune-modulator into said immunized subject.

17. (Withdrawn) A tumor cell composition comprising a tumor cell modified to express a B7-2 protein and at least one additional immune modulator, or a functional fragment of said B7-2 protein or said immune modulator.

18. (Withdrawn) The tumor cell composition according to claim 17, wherein said at least one additional immune modulator is a cytokine protein.

19. (Withdrawn) The tumor cell composition according to claim 18, wherein said cytokine protein is selected from the group consisting of interleukin 2, interleukin 4, interleukin 6, interleukin 7, interleukin 12, granulocyte-macrophage colony stimulating factor, granulocyte colony stimulating factor, interferon-gamma, and tumor necrosis factor-alpha.

20. (Withdrawn) The tumor cell composition according to claim 18, wherein said cytokine protein is granulocyte-macrophage colony stimulating factor.

21. (Amended) An expression vector comprising a polynucleotide sequence encoding a B7-2 protein and at least one additional immune modulating protein[, or a functional fragment of said B7-2 protein or said immune modulator].

22. The expression vector according to claim 21, wherein said at least one additional immune modulating protein is a cytokine protein.

23. The expression vector according to claim 22, wherein said cytokine protein is selected from the group consisting of interleukin 2, interleukin 4, interleukin 6, interleukin 7, interleukin 12, granulocyte-macrophage colony stimulating factor, granulocyte colony stimulating factor, interferon-gamma, and tumor necrosis factor-alpha.

24. The expression vector according to claim 22, wherein said cytokine protein is granulocyte-macrophage colony stimulating factor.

25. The expression vector according to claim 21, wherein said expression vector is a viral vector.

26. The expression vector according to claim 25, wherein said viral vector is a

retroviral vector.

27. The expression vector according to claim 25, wherein said viral vector is an adenoviral vector.

28. The expression vector according to claim 21, wherein said expression vector is encapsulated by, or complexed with, a liposome.

29. (Withdrawn) A method for the treatment or prevention of cancer comprising:

a) providing a polynucleotide encoding a B7-2 protein and at least one additional immune modulator, or a functional fragment of said B7-2 protein or said immune modulator;

b) transferring said polynucleotide into cancer cells under conditions such that said B7-2 protein and said immune modulator are expressed by at least a portion of said cancer cells; and

c) administering an effective amount of the modified cancer cells of step b) to a patient.

30. (Withdrawn) The method according to claim 29 further comprising irradiating said cancer cells expressing said B7-2 protein and said immune modulator prior to administering said irradiated cancer cells into said patient.

31. (Withdrawn) The method according to claim 30, further comprising introducing at least one additional dose of irradiated cancer cells expressing said B7-2 protein and said immune modulator into said immunized subject.

32. (Withdrawn) The method according to claim 29, wherein said at least one additional immune modulator is a cytokine protein.

33. (Withdrawn) The method according to claim 32, wherein said cytokine protein is selected from the group consisting of interleukin 2, interleukin 4, interleukin 6, interleukin 7, interleukin 12, granulocyte-macrophage colony stimulating factor, granulocyte colony stimulating factor, interferon-gamma, and tumor necrosis factor-alpha.

34. (Withdrawn) The method according to claim 32, wherein said cytokine protein is granulocyte-macrophage colony stimulating factor.

35. (Withdrawn) The method according to claim 29, wherein said

polynucleotide is transferred by a viral vector.

36. (Withdrawn) The method according to claim 35, wherein said viral vector is a retroviral vector.

37. (Withdrawn) The method according to claim 35, wherein said viral vector is an adenoviral vector.

38. (Withdrawn) The method according to claim 29, wherein said polynucleotide is encapsulated by, or complexed with, a liposome.

39. (Withdrawn) The method according to claim 29, wherein said cancer cells are from a solid tumor.

40. (Withdrawn) The method according to claim 29, wherein said cancer cells are from a brain tumor.

41. (Withdrawn) The method according to claim 40, wherein said brain tumor is a glioblastoma.

42. (Withdrawn) The method according to claim 29, wherein said cancer cells are from a melanoma.

43. (Withdrawn) A method for the treatment or prevention of cancer comprising administering to a subject in need thereof an effective amount of a tumor vaccine comprising a tumor cell modified to express a B7-2 protein and at least one additional immune modulator, or a functional fragment of said B7-2 protein or said immune modulator.

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44. (Withdrawn) The method according to claim 43, wherein said at least one additional immune modulator is a cytokine protein.

45. (Withdrawn) The method according to claim 44, wherein said cytokine protein is selected from the group consisting of interleukin 2, interleukin 4, interleukin 6, interleukin 7, interleukin 12, granulocyte-macrophage colony stimulating factor, granulocyte colony stimulating factor, interferon-gamma, and tumor necrosis factor-alpha.

46. (Withdrawn) The method according to claim 43, wherein said cytokine protein is granulocyte-macrophage colony stimulating factor.

47. (Withdrawn) The method according to claim 43, wherein said cancer cells are from a tumor.

48. (Withdrawn) The method according to claim 43, wherein said cancer cells are from a brain tumor.

49. (Withdrawn) The method according to claim 48, wherein said brain tumor is a glioblastoma.

50. (Withdrawn) The method according to claim 43, wherein said cancer cells are from a melanoma.
